

(12) **UK Patent Application** (19) **GB** (11) **2 384 234** (13) **A**

(43) Date of A Publication 23.07.2003

(21) Application No 0131011.9

(22) Date of Filing 28.12.2001

(71) Applicant(s)  
**Nigel Peter Maus**  
65 Queensville, STAFFORD, ST17 4NL,  
United Kingdom

(72) Inventor(s)  
**Nigel Peter Maus**

(74) Agent and/or Address for Service  
**Urquhart-Dykes & Lord**  
Three Trinity Court, 21-27 Newport Road,  
CARDIFF, CF24 0AA, United Kingdom

(51) INT CL<sup>7</sup>  
**B60R 7/02**

(52) UK CL (Edition V )  
**B8P PK12**  
**B7J J64**

(56) Documents Cited  
**GB 2274832 A** **GB 2267876 A**  
**EP 1162115 A1** **EP 0983902 A1**  
**US 6253943 A** **US 5772058 A**  
**US 5538148 A** **US 5230690 A**

(58) Field of Search  
UK CL (Edition V ) **B7J, B8P PK12**  
INT CL<sup>7</sup> **B60R 7/02**  
Other: **ONLINE:WPI,EPODOC,JAPIO**

(54) Abstract Title  
**Unit for keeping shopping tidy in a car boot**

(57) A unit for keeping shopping tidy in the boot of a car comprises a structure having an expanded condition in which it provides a plurality of open-top compartments (S,S1,S) for receiving bags or individual items of shopping, and a compact condition for storage. The structure shown comprises front and rear panels (14,12) and folding dividers (20) such that the front and back panels may be moved together to provide the compact condition, in which the dividers are folded up between the front and back panels.

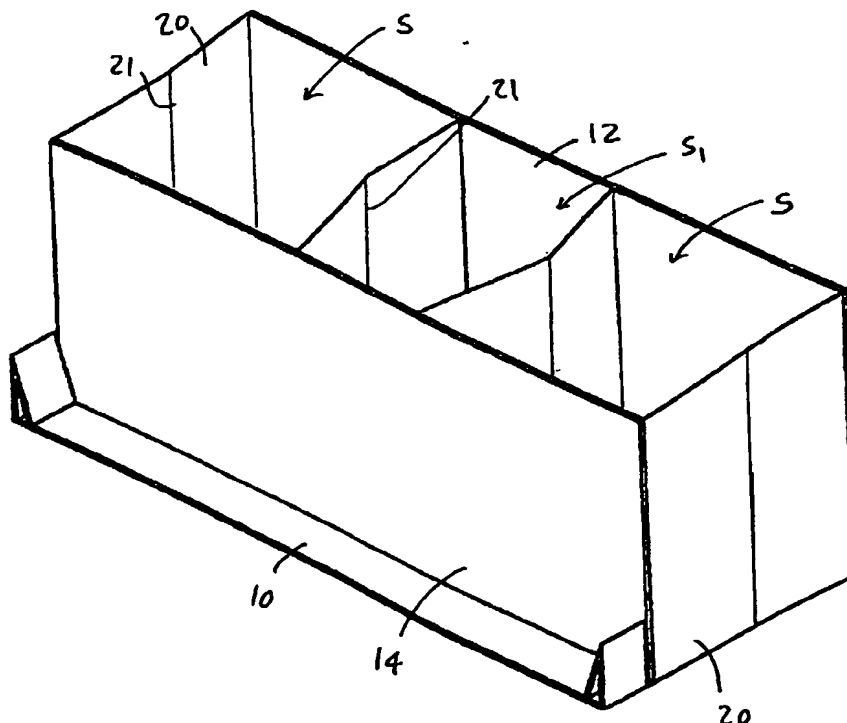


Figure 1

Figure 1

2/5

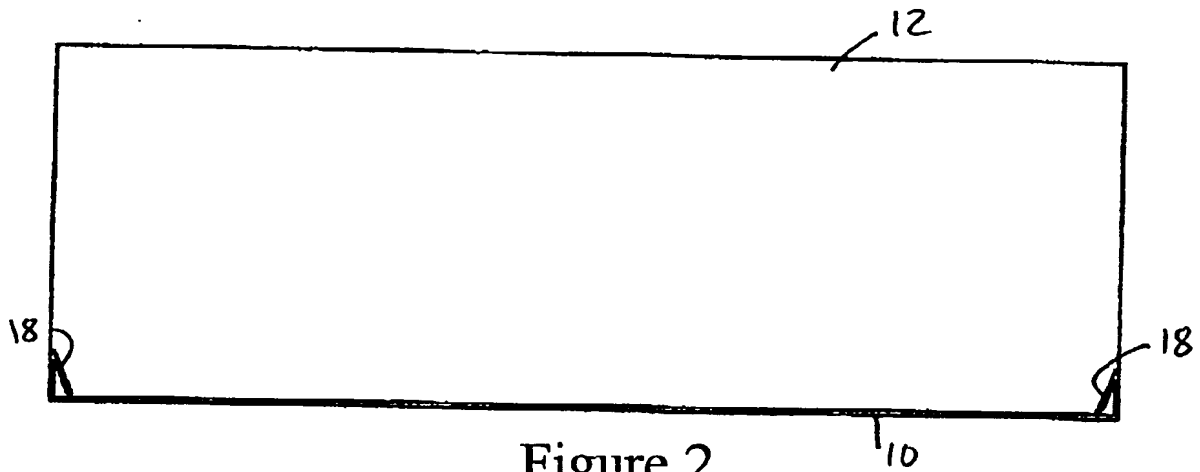


Figure 2

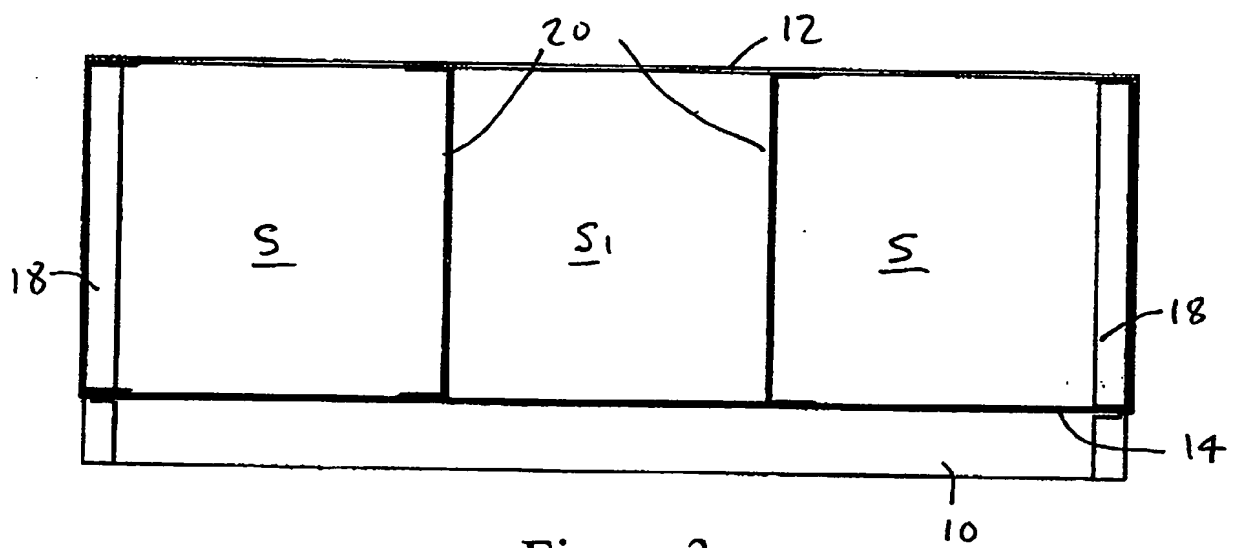


Figure 3

3/5

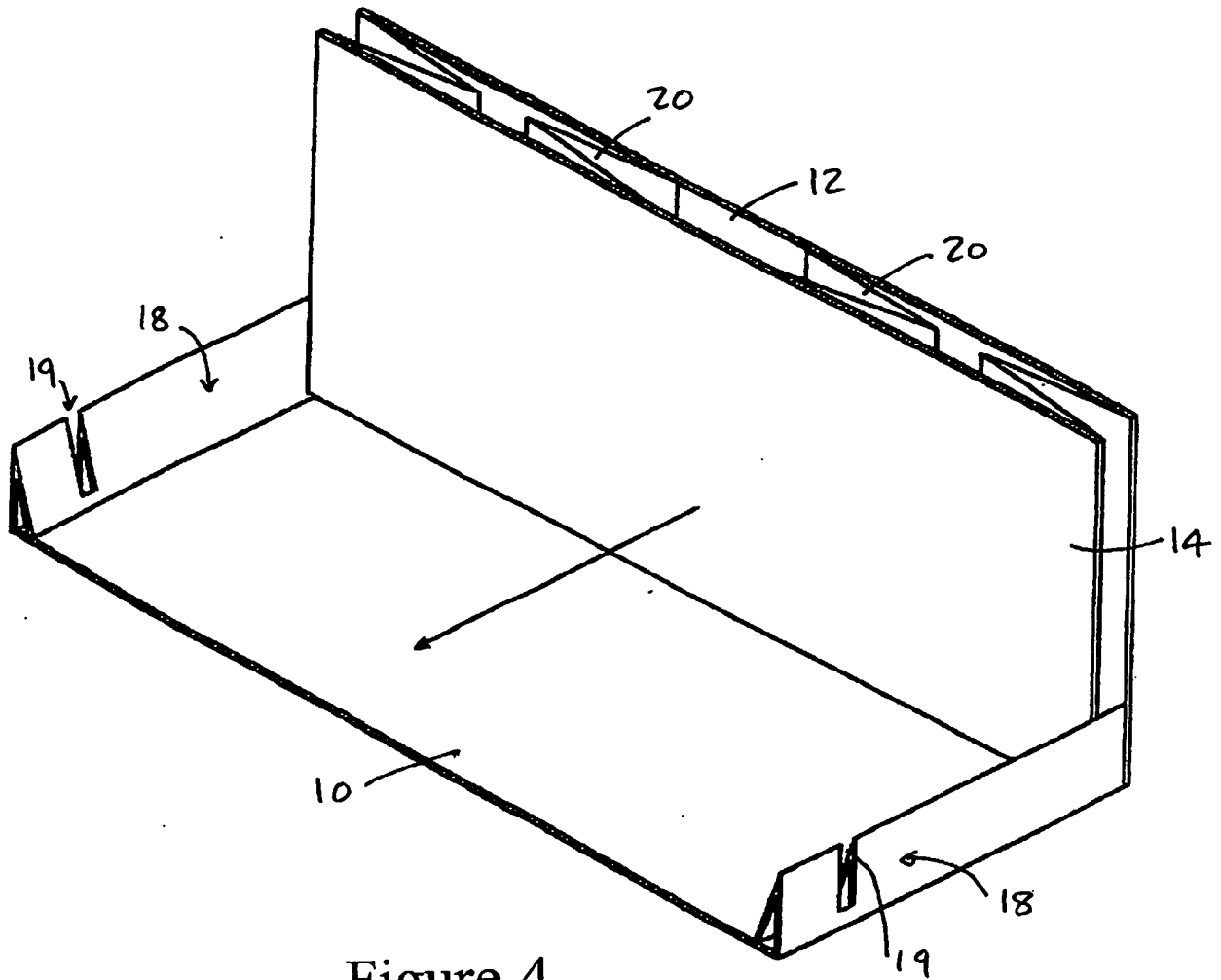


Figure 4

Figure 5

5/5

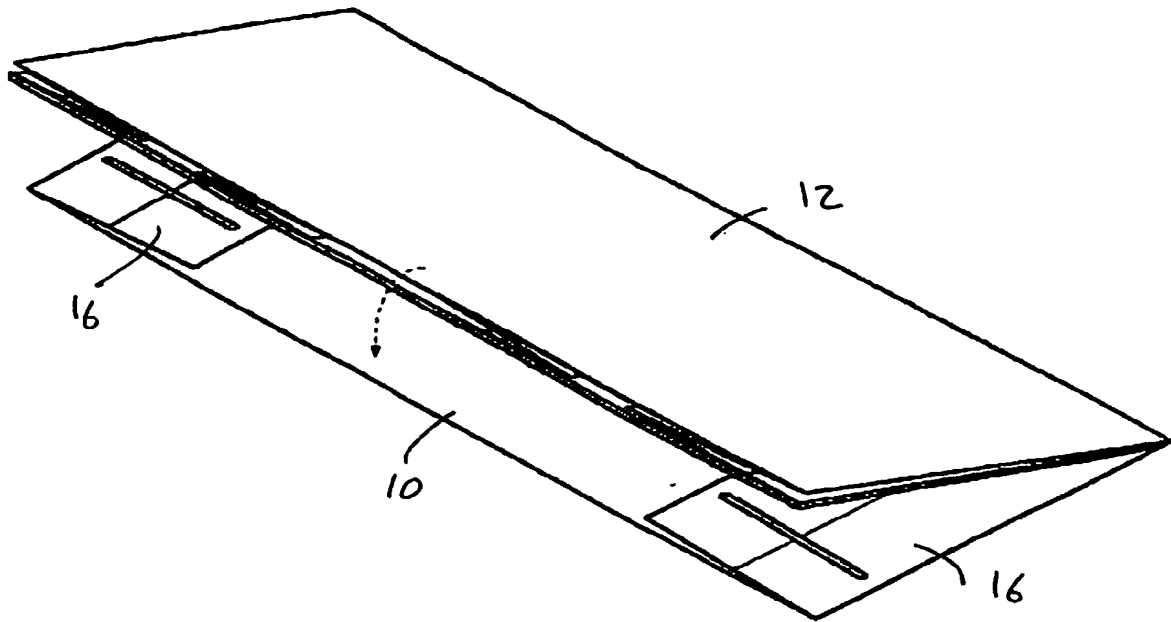


Figure 6

Shopping tidy unit

The present invention relates to a unit for keeping shopping tidy in the boot of a car.

A number of arrangements have been proposed hitherto for keeping shopping tidy in the boot of a car, preventing the  
5 shopping becoming thrown out of shopping bags during a journey. Such arrangements have suffered a number of disadvantages, variously being of complicated or expensive construction, difficult to use or of limited effectiveness.

I have now devised a unit which is of simple and  
10 inexpensive construction yet is easy to use and effective in keeping shopping tidy in the boot of a car.

In accordance with the present invention, there is provided a unit which comprises structure having an expanded condition in which it provides a number of open-top  
15 compartments for receiving bags or individual items of shopping, and a compact condition for storage.

Preferably the structure comprises a front panel and a back panel, having a number of folding dividers extending between the front and back panels, such that the front and back  
20 panels may be moved apart to expand the dividers and form the series of compartments, or moved together to fold the dividers up between them.

The dividers may be provided by square or rectangular-section tubes, each tube having front and rear panels attached  
25 (e.g. by adhesive) to the main front and rear panels, and opposite sides. Preferably the opposite sides fold inwardly. Preferably the unit comprises two such tubular dividers side-by-side with a space between them.

Preferably the unit comprises a bottom panel,  
30 preferably hinged to the main back panel.

Preferably means are provided (preferably on the bottom panel) for holding the main front panel in position in the expanded condition of the unit. Preferably such means are provided by end flaps of the bottom panel: preferably each end  
35 flaps folds up into a triangular formation having an upwardly-facing recess to receive the bottom edge of the main front

panel.

An embodiment of the present invention will now be described by way of example only and with reference to the accompanying drawings, in which:

5       FIGURE 1 is an isometric view of a unit providing compartments for keeping shopping tidy in the boot of a car;

FIGURE 2 is a front view of the unit shown in FIGURE 1;

FIGURE 3 is a top plan view of the unit;

10       FIGURE 4 is an isometric view of the unit, shown partially assembled;

FIGURE 5 is a similar view of the unit at an earlier stage of assembly; and

FIGURE 6 is a similar view of the unit when folded flat for storage.

15       Referring to the drawings, there is shown a unit which may be folded flat for storage when not in use, but which may be erected to provide a number of compartments for receiving bags or individual articles of shopping, to keep this shopping tidy in the boot of a car.

20       The unit is formed from corrugated cardboard or other sheet material and comprises a blank forming a rectangular bottom panel 10 and a rectangular back panel 12, a rectangular front panel 14 and two folding dividers 20 secured on the one hand to the back panel 12 and on the other hand to the front  
25       panel 14.

Thus, the bottom panel 10 and back panel 12 are provided by a single blank formed with a longitudinal fold, preferably a double fold to allow for the thickness of the front panel 14 and dividers 20 when the unit is folded down  
30       flat. The opposite ends of the bottom panel 10 are formed with integral flaps 16, each formed with a fold 15 parallel to the end edge of the panel 10 and also, adjacent the front edge of the blank, with a slot 17 extending across the fold line 15. It will be noted that each flap 16 is arranged to be folded on  
35       itself and then upwards, to form a triangular-section formation 18 at each end of the bottom panel of the unit, with the slots 17 forming an upwardly-facing recess 19, as best shown in



Figure 4. The outer edges of the flaps 16 may be formed with projecting legs 16a, as shown on one of the flaps, for locating in slots 10a in the bottom panel 10.

Each of the folding dividers 20 comprises a rectangular blank folded to form a rectangular or square-section tube, open at its top and bottom, the opposite ends of the blank being joined together. The opposite sides of the tubular dividers are formed with longitudinal fold lines 21 so that these opposite sides fold inwardly towards each other as the front and back panels of the tubular divider are moved together. The front and rear panels of each tubular dividers are secured e.g. by adhesive face-to-face to the main front and rear panels 14, 12 of the unit.

It will be noted from Figure 5 that the main front panel 14 may be moved up against the main rear panel 12, with the tubular dividers 20 folding flat between the two panels 14, 12.

When the end flaps 16 are folded into their triangular formations 18, as shown in Figure 4, the main front panel 14 may be moved forwardly, so expanding the dividers 20 into their tubular shapes. The bottom panel 10 is flexed, relative to the back panel 12, to bring the triangular formations into the open bottoms of the respective expanded dividers, and the front panel 14 is engaged into the recesses 19 provided by the slots 17 in the end flaps 16, as shown in Figures 1 and 3.

The dividers 20 are thus maintained in their expanded conditions: to bags or individual items of shopping may now be placed into the spaces 5 provided within the expanded dividers 20, and into the space 5, provided between the two dividers,

When not required for use, the unit may be folded flat. Referring to Figure 5, the end flaps 16 are folded out flat and the front panel 14 is moved up against the back panel 12, so folding the dividers 20 flat between the front and back panels 14, 12. Then, referring to Figure 6, the end flaps 16 are folded over to lie flat on the top of the bottom panel 10 and, finally the back panel 12 (together with the flattened dividers and the front panel) is folded flat onto the bottom panel. The

end flaps 16 may be formed with finger holes e.g. 16b, for assistance when collapsing the unit.

Preferably the lower surface of the bottom panel 10 is provided with pieces of Velcro (hook and pile fasteners) to  
5 inhibit it from slipping on the floor of the car boot.

Claims

- 1) A unit for keeping shopping tidy, the unit comprising a structure having an expanded condition in which it provides a plurality of open-top compartments for receiving bags or  
5 individual items of shopping, and a compact condition for storage.
- 2) A unit as claimed in claim 1, comprising a front panel and a back panel, with a plurality of folding dividers extending between said front and back panels, such that said  
10 front and back panels may be moved apart to expand said dividers and form said plurality of compartments, or moved together to fold the dividers up between them.
- 3) A unit as claimed in claim 2, in which said dividers are provided by square or rectangular-section tubes, each said tube  
15 having front and rear panels attached to said front and rear panels of said structure, and opposite sides.
- 4) A unit as claimed in claim 3, in which the opposite sides of said tubes fold inwardly.
- 5) A unit as claimed in claim 3 or 4, comprising two said  
20 tubes positioned side-by-side with a space between them.
- 6) A unit as claimed in any preceding claim, further comprising a bottom panel.
- 7) A unit as claimed in claim 6, in which said bottom panel is hinged to said back panel of said structure.
- 25 8) A unit as claimed in claim 6 or 7, in which said bottom panel is provided with means for holding the front panel of said structure in position in the expanded condition of the unit.

9) A unit as claimed in claim 8, in which said holding means are provided by end flaps of said bottom panel.

10) A unit as claimed in claim 9, in which each said end flap folds up into a triangular formation having an upwardly-  
5 directed recess to receive the bottom edge of said front panel of said structure.

11) A unit for keeping shopping tidy, the unit being substantially as herein described with reference to the accompanying drawings.



INVESTOR IN PEOPLE

Application No: GB 0131011.9  
Claims searched: 1 to 11

Examiner: Mike Henderson  
Date of search: 14 May 2003

## Patents Act 1977 : Search Report under Section 17

### Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance	
X	1,6 & 7	GB 2274832A	(QUOTATECH LTD) (Whole disclosure relevant)
X	1,6 & 7	GB 2267876A	(DARWEN) (Whole disclosure relevant)
X	1,6 & 7	EP 1162115A1	(JOHNSON CONTROLS GmbH) (Whole disclosure relevant)
X	1,6 & 7	EP 0983902A1	(NISSAN EUROPEAN TECHNOLOGY CENTRE LTD) (Whole disclosure relevant)
X	1,6 & 7	US 6253943	(SPYKERMAN et al) (Whole disclosure relevant)
X	1	US 5772058	(STAESCHE) (Whole disclosure relevant)
X	1 to 5	US 5538148	(INDYK) (Whole disclosure relevant)
X	1	US 5230690	(ADKINSON et al) (Whole disclosure relevant)

### Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>v</sup>:

B7J B8P

Worldwide search of patent documents classified in the following areas of the IPC<sup>7</sup>:

B60R

The following online and other databases have been used in the preparation of this search report:

ONLINE: WPI, EPODOC, JAPIO